

# Mohave County Miner.

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## GOING TO MOVE

ON or about July 1st we will move to the new Lake Building, and to avoid cost of moving and stock-taking, we will sell at cost and under all

**Dry Goods,  
Boots & Shoes  
Hats, Notions  
Etc., Etc.,**

This is a genuine

## CLEARANCE SALE,

As prices quoted on the few articles named will show:

All Calicos.....4½ to 6c per yard  
Light Satteens.....6c "  
Black Perf'd Lawns.....12½c "  
Linen Percsles.....12½c "  
Epingelines.....15c "  
Trouvilles, Fast Colors 6c "  
Persian Mulls.....10c "  
Dotted Swiss.....14c "  
Outing Flannels.....10c "  
Ginghams.....6½ to 11c "  
White Lawns.....12½c "  
Henriettes.....45c "  
(One Piece, very nice.)  
India Linens, White.....15c "  
Fast Black Satteens.....20c "  
All one inch Ribbons 10c "  
All two ".....15c "  
All six " and over 40c "

Mens' underwear, shirts and Hose, all at Cost.

Your pick of Straw Hats, 15c to 75c.; best of them sold for \$1.50.

**These Prices are Spot  
Cash, and the Goods  
are Right.**

We intend to maintain our reputation of being the closest buyers, and of selling on smaller margins than any other house in Northern Arizona. We are here to stay and want our friends to know that we are "strictly in it." We put in all our time working for the interests of our customers, for our interests are identical. Come and see us; you will find us more than ready to extend you every courtesy and legitimate favor in our power.

**Kingman  
Mercantile  
Company.**

## Death Valley Geological Jumble.

Although a dreary region enough, and very hot in summer, Death Valley is by no means the fearful place many have painted it. In the same region there are many places that are more dangerous. Death Valley itself is a most dreary, disagreeable and uninteresting spot. It is merely the old dried-up sink of the extinct Amargosa river, and shows an ancient lake basin in which lie deposits of salt, soda, borax and small quantities of other minerals. The bugs, lizards, snakes and other creatures found in this depression are no more wonderful than are those found in and about the other deserts in the same neighborhood. The region in which Death Valley is situated is far more wonderful and interesting than is the valley itself. Instead of being a place for the small finds of the "bug hunter," it is a field for great finds by the geologist. It is a grand geological jumble, and a place that has been the scene of comparatively recent extensive and terrific volcanic activity. All indications show that it was at one time a veritable land of fire. Lava flows, old volcanic cones, extinct craters, steaming hot springs and bubbling solfataras show that smoke and flames at some not very distant day in the past covered thousands of square miles of territory.

From time to time there are disputes as to whether any part of Death Valley is really below the level of the sea. The latest observations show that a considerable portion lies below sea level. At the lowest point it is 110 feet below. This depression extends north and south in the old lake basin for a distance of about sixteen miles. The ground worked by the Eagle Borax Company is seventy feet below sea level, and it is four miles west of the deepest depression. It is on account of the name it bears that most writers have painted it as a place full of terrors. There are many places in the world that have a far greater depth below the level of the sea than Death Valley about which we hear no cock-and-bull stories of death in the air. A spot on the Southern Pacific Railroad is 200 feet lower, and passengers pass over it without being aware of the fact that they are below the level of the sea.

Few persons know that the greater part of the public life of the Saviour was spent in a place that lies 700 feet below the level of the sea, yet that is the depth of the depression in which is situated the sea of Galilee. The river of Jordan, in which Christ was baptized, is below the level of the sea, and the Dead Sea, into which it empties, is 1,312 feet below sea level. In no other place in the world is there a river flowing for a distance of 200 miles, or even a single mile, below the level of the sea. But at the Dead Sea and along the valley of the Jordan great altitude does not exist side by side with great depression. The cliffs of Jordan, on the west of the Dead Sea, are but 1,000 to 1,500 feet high, and no peaks in the country rise to a height exceeding 3,000 feet above sea level. At Death Valley, however, but fifteen miles distant from the point of greatest depression, rises (on the west) Telescope Peak, which has an altitude of 10,937 feet above sea level and 11,937 feet above the sink in the valley.

To get some idea of the depth of Death Valley, we have but to observe the altitude of surrounding places that appear to be considerable depressions. Thus, Washoe Lake is 5,000 feet above the level of the sea; Mono Lake 6,350; Yosemite Valley presents the appearance of an immense depression, yet it is 4,000 feet above the level of the sea.

Death Valley is about thirty miles long and ten miles wide; therefore, were a man placed in the middle of it, he would have to travel only about five miles to reach the hills by which it is surrounded. People live in the valley, dig borax in the valley and have gardens in the valley. Furnace Creek flows about 100 inches of water suitable for irrigation and domestic purposes, though quite warm. The place where the emigrants lost their lives in 1850 is not in Death Valley, but at Lost Wagon Springs, on the northern border of the valley. The water of these springs is strongly alkaline.

Some writers have described Death Valley as being almost as fatal to life as was the atmosphere which surrounded the fabled upas tree in the island of Java, asserting that birds attempting to fly over the valley drop dead. A Mr. Hawkins, of California, appears to have had some faith in this story. He says he "picked up two little birds that had evidently just dropped dead, their bodies being still quite warm." Hawkins further says: "The dryness of the air is so excessive that moisture is withdrawn from the body faster than it can be supplied through the system. From this cause frequent cases of death have occurred when water was plenty, but which could not be drunk fast enough to supply the drain caused by the desiccative power of the dry, hot air."

I shall not dispute that the deaths occurred, but cannot agree with Mr. Hawkins as to the cause. I am of the opinion that, owing to the very rapid evaporation of the large quantities of water drunk, the persons of whom he speaks were frozen to death. A post mortem examination would doubtless have shown their stomachs blocked up with masses of ice.

The country rocks in the section of country surrounding Death Valley are mainly sandstones, limestones, shales and others of a stratified and sedimentary character, with some heavy conglomerate deposits. These are cut through in many places by upheavals of granite and other igneous rocks and tilted in all directions. In places there are beds of gravel hundreds of feet thick. Some of these gravel beds have been turned upon edge and covered with lava. Flows of lava and basalt also often cap the sandstone and other sedimentary rocks. In the limestones are found fossil corals and in places fossil shells are abundant, chiefly large conical univalves. In all directions are to be seen signs of great upheavals and fierce volcanic action. The whole face of the country appears to have been tossed and tumbled about half a dozen times, terminating at last in a volcanic outburst that capped nearly all the rocks of the country with lava and basalt. Mud banks of great thickness are another feature in places, and some of these have a capping of basalt eight to ten feet thick. In hundreds of places are found hot springs and solfataras.

Near Bennetts Wells (Death Valley) are the "Curious Buttes," being hills showing strata of yellow and blue material, and near these "Belted Mountains" there are deposits of flexible sandstone (itacolumite), well known to be a good indication of the presence of diamonds. All about are also plenty of extinct craters of every age. In no other region on the Pacific Coast are there better indications of diamond fields.

North of Death Valley, about Alida Valley, the mountains consist mainly of coralline limestone, of both the black and yellow varieties; mica slates, very compact and crystalline, and granite, with whitish mica. The limestones are very largely developed, and in many places are made up of small fragments, evidently detached from coral reefs and afterward cemented together. The whole mass is largely made up of corals. In this region are many quartz veins from two to five feet in width. They have the dip and strike of the clay slates in which they are mainly found. The latter overlie the metamorphosed mica slates, and are capped with limestone. The Fish Lake Valley region, near by, is much the same geologically.

About sixty miles west of Death Valley lies Owens Valley. This is a narrow valley, about 150 miles in length, lying along the eastern base of the main Sierra Nevada range. Owens Valley was undoubtedly at one time a chasm or fissure of immense depth, formed at the time of the upheaval of the Sierra Nevada range, and since filled to its present level with debris. A series of narrow valleys, extending for hundreds of miles along the eastern base of the Sierras, show the line of fracture at the time of the upheaval of the range. Hundreds of hot springs in these valleys also mark the course of the tremendous chasm.

The granite, of which the Sierra Nevada range is mainly composed, has been elevated since the Jurassic period, while

Highest of all in Leavening Power.—Latest U. S. Gov't Report

# Royal Baking Powder

**ABSOLUTELY PURE**

the mountains to the eastward are much more ancient, belonging to the great paleozoic formation, which occupies an extensive area in the Great Basin region. The stratified rocks of this region are vastly ancient. The tracks of elephants, tigers, giant birds and other creatures found in sandstone in Nevada about Carson City were probably made ages and ages before the Sierra Nevada range was upheaved.

After the Sierras were formed, and at a time so late that they presented much the same appearance as at present in all their outlines of slope and canyon, there appears to have occurred a period of fire and flames in connection with tremendous upheavals and convulsions. Evidences of the gigantic forces at this time called into play are visible on every hand in the country about Death Valley. Owens Valley and other sections in that region. Volcanic cones are to be seen in all directions, many of them still perfect in every part, and from these issued rivers of lava and streams of obsidian, so recently that the detrital slopes of the Sierras, above Owens Valley, are seen to have been covered by them. Also present canyons are seen to have been blackened by lava flows, and lava in places covers the soil and loose rocks.

A number of volcanic cones—some 2,000 feet in height—formed in Owens Valley after the surface had assumed its present level and appearance. The summits of these cones are dark red in color and the lower parts are black. The vents show a glazing like that of pottery. Several cones burst up through the granite at the base of the Sierras. All these poured forth lava or streams of obsidian. A Fish Springs is one lava flow that is three and one-fourth miles wide. It came from a cone that has two craters of great size and depth. That these outbursts were comparatively recent, is shown by the fact that in places they cover sagebrush flats in sheets that have the same slope as the ground. In scores of places between Owens Valley and Death Valley lava patches are to be seen where no cone or crater can be found. They are formed of lava that was squeezed up through the ground by the great internal pressure. Some of this not being sufficiently fluid to flow, lies in heaps. In the strain of some great subterranean throes it was squeezed out a sausage is from a stuffer. These sporadic patches of lava probably cover a small vent or fissure of some kind.

In places the streams of obsidian (mountain glass) resemble creeks turned to crystal. This obsidian is found of all the colors of the solar spectrum. Much of it might be worked up into ornamental articles of various kinds. Formerly the Indians used it in making arrow heads. They manufacture these arrow points very rapidly. All is done with a touch of wet buckskin. A flake of obsidian is heated, when it breaks wherever the wet and cold buckskin touches it. An Indian expert will make a dozen arrow heads in less than ten minutes. How this material became so widely distributed is a puzzle; the whole face of the country is covered with fragments of it. Indian ammunition is abundant.

It is expected that sooner or later this region will receive another baptism of fire. It came very near to it in 1872. About two o'clock on the morning of March 26, in that year, occurred an earthquake shock that leveled nearly every building in Owens Valley. In an instant twenty-three persons were killed and sixty wounded, several of whom died of their injuries. A succession of similarly heavy shocks rapidly followed. No such tremendous convulsion of the earth has ever been known before or since in any place in the United States, except perhaps at New Madrid, Missouri, in 1811. It shook the whole Pacific Coast. A big tidal wave rolled across

the Gulf of California, several big buildings in the City of Mexico were damaged, and the volcano of Colima burst into eruption.

All Owens Valley was rent by immense fissures. Roads, fences and ditches were in places sunk several feet and at the same time moved horizontally out of lide from four to five yards. Owens river, a stream twenty-five yards wide and very deep, was dry in the lower part for eight hours. In one place fish were thrown out of the river to the dry land, where they were picked up. It is supposed that by the opening and closing of crevices columns of water containing the fish were spouted in such a direction as to fall on the shore. In the valley many cattle were caught in the crevices and killed. At one time the waters of Owens Lake (seventeen miles long and ten miles wide) were all piled up in a wall in the center of the lake basin. Immense quantities of boulders tumbled down off the slopes of the Sierras into the valley, causing an awful crashing and aiding greatly to the terrors of the people, who feared the mountain peaks were about to pitch down upon them. Balls of electrical fire rolled back and forth across the valley from range to range with tremendous reports and convulsions as they struck and exploded and flames were shot from the old cones up in the mountains. In that first night the people left alive in the valley thought the end of all things had come and they were witnessing the great smash up. And no wonder they thought the solid earth crumbling, for some of the masses of granite that rolled down into the valley that first night were of the bulk of 200 cubic yards.

Owens Valley was in a constant tremor all that summer, and often there were from twenty to forty shocks in twenty-four hours. The valley was so rent with fissures that the air was constantly loaded with the fumes of sulphur. Yet the people stuck to their ranches, though they were living directly over a chasm extending down to the central fires of the earth.

To the southward of Death Valley lies the great Mojave desert—a region of sand, alkali, and rugged unexplored ranges of mountains. To the eastward lie many great ranges of mountains, with plains more or less arid between. Here, in the edge of the Ash Meadows, are the mines discovered some years ago by Messrs Montgomery and Shattuck, supposed at the time to be the long lost Brextole mines, as at first gold could be picked up on the surface, and twelve pounds of gold were pounded out of forty pounds of quartz rock. These mines have been opened and found to be good paying properties. There are several veins of large size; five miles north are other fine veins of gold-bearing quartz, and still further north, about six miles, are several more. All these veins are paying well. In this region are some good silver prospects, rich veins of copper and numerous veins of galena. In this same neighborhood alum and several other similar minerals are found. As there are natural springs at Pah Rump Valley that flow from 1,000 to 2,000 inches of water, it is thought artesian wells would prove a success in this region.

Once a railroad is built through this country, between Salt Lake City and Los Angeles, there will be a grand rush of sight-seers, geologists and other scientists to the wild region round about Death Valley. It is a field that will furnish many hard nuts for the scientists to crack.—Correspondence Mining Industry and Tradesman.

The guarantee fund of \$300,000 for the great exposition at Denver is now considered to be in sight. It is to be the greatest industrial show ever given between Chicago and San Francisco.